

Wide Band, Precision

CURRENT

With a Pearson current monitor and an oscilloscope, you can measure pulse or ac currents from milliamperes to kiloamperes, in any conductor or beam of charged particles, at any voltage level up to a million volts, at frequencies up to 35 MHz or down to 1 Hz.

The monitor is physically isolated from the circuit. It is a current transformer capable of highly precise measurement of pulse amplitude and waveshape. The one shown above, for example, offers pulse-amplitude accuracy of +1%, -0% (typical of all Pearson current monitors), 10 nanosecond rise time, and droop of only 0.5% per millisecond. Three db bandwidth is 1 Hz to 35 MHz.

Whether you wish to measure current in a conductor, a klystron, or a particle accelerator, it's likely that one of our off-the-shelf models (ranging from 1/2" to $10^3/4$ " ID) will do the job. Contact us and we will send you engineering data.

PEARSON ELECTRONICS INC

4007 Transport St., Palo Alto, California 94303 Telephone (415) 326-7285



Circle No. 132 on Reader Service Card

obituaries

search associate at the California Institute of Technology (1971–72), he made significant contributions to nuclear many-body theory.

Fiset was an avid outdoorsman and an enthusiastic mountaineer. In 1972 he left the world of physics, and he and his wife established a primitive-style farm on the Olympic Peninsula of Washington State. He died near his cabin.

> LAWRENCE WILETS Department of Physics University of Washington

Frank D. Enck

Frank D. Enck, professor of physics and, since 1961, chairman of the physics department at Franklin and Marshall College, died on 16 December at the age of 47.

After graduating from Franklin and Marshall College, Enck pursued graduate studies at the University of Maryland, completing his PhD in 1957. Except for the 1966-67 academic year, during which his time was divided between work with Clayton A. Swenson's group at Iowa State University and Jorgen L. Olsen's group at the Eidgenössiche Technische Hochschule in Zurich, Enck spent his entire professional career at Franklin and Marshall.

Although Enck considered himself primarily a teacher, he was active in several areas of research, especially low-temperature thermal properties of superconductors.

LEONARD V. CHERRY Department of Physics Franklin and Marshall College

Heinrich B. Helmbold

Heinrich B. Helmbold, the man responsible for the aerodynamic design of the HE-178, the first jet airplane ever to fly, died on 22 December.

Born in Eisenach, Germany, in 1899, Helmbold was a student at the Humanistiches Gymnasium, the same high school Martin Luther attended several hundred years before. After studying engineering and technical physics at Hanover and the University of Göttingen, he became chief of the theoretical aerodynamical and jet-airplane research department at the Ernest Heinkel Airplane Manufacturing Co. It was here that he worked on the HE-178.

Helmbold came to the US in 1951 to work in the engineering research department at the University of Wichita. He remained there until 1956, when he joined the Fairchild Airplane Division in Hagerstown, Maryland. In 1964 he



Circle No. 133 on Reader Service Card

HI-VACUUM BAKEABLE HARDWARE FROM CERAMASEAL

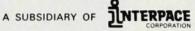
- Hi-Voltage & Hi-Current Feedthrus
- Sapphire Quartz & Glass-Metal Windows
- Flanges, Mini-Flanges, and Fittings
- Connectors and Cable Assemblies

Maintain ultra-high-vacuum seals at 10-11 torr or

Feedthrus and windows feature high-reliability ceramic-metal seals made with refractory and active-metal processes. Withstand standard baking temps.

Flanges and flange-mounted units available in General Electric or Varian Associates designs. Tube and adapter units installable by brazing, soldering, heli-arc welding. Feedthru ratings to 100 KV peak operating, hi-current units to 1000 amp. Many connector feedthru styles. Standards and specials. Request Cat. HVF (feedthrus), W (windows), VFF (flanges & fittings), and/or CC (connectors and cable assemblies).

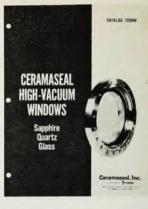
Ceramaseal, Inc.

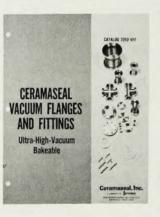


NEW LEBANON CENTER, NEW YORK 12126 • 518 794-6101 • TELEX 145442

Booth 6 Physics/Optics Show Circle No. 134 on Reader Service Card









Available from OPHTHOS

The Electrodeless Lamp System

MICROWAVE GENERATOR

ELECTRODELESS LAMPS

CAVITIES for use with 2450 MHz GENERATORS

VACUUM ULTRAVIOLET SOURCES

for use in

ATOMIC ABSORPTION AND FLUORESCENCE

OPTICAL PUMPING

VACUUM ULTRA-VIOLET **PHOTOLYSIS**

INTERFEROMETRY

SPECTROSCOPY

OPHTHOS INSTRUMENT COMPANY

9600 Overlea Drive, Rockville, Maryland 20850

Booth 4 Physics/Optics Show

Telephone: 301-762-4413

MIX & MATCH DEMOUNTABLE SCINTILLATORS



Thallium-activated sodium iodide is the most efficient scintillator for gamma ray detection. Now it's also one of the easiest to use.

A new design concept in sodium iodide assemblies offers detector replacement with ease.

Choose the size, resolution or type of Nal(TI) detector—or switch to a scintillating glass or a plastic scintillator. Just unscrew and replace for unmatched versatility and convenience.

A complete line of standard and low-background demountable assemblies is available. Special assemblies made on request.



For technical specifications and ordering information call or write:

luclear enterprises, inc.

935 Terminal Way/San Carlos, Ca. 94070/(415) 593-1455/Telex 348-371

Circle No. 136 on Reader Service Card

obituaries

became a consultant to the airplane division of the Boeing Co, finally retiring in 1964.

Gerald W. Fox

Gerald W. Fox, long-time head of the department of physics at Iowa State University at Ames, died after a long illness in a nursing home in Oregon at the age of 73.

Fox received his PhD from the University of Michigan and taught there for three years before coming to Iowa State in 1930. There he became especially active in research on conduction of electricity through gases and piezoelectric effects in quartz. He received leave of absence during World War II to go to the MIT Radiation Laboratory to join in the radar research there. At the close of the war he served as scientific adviser in Japan on the staff of General Douglas MacArthur. During



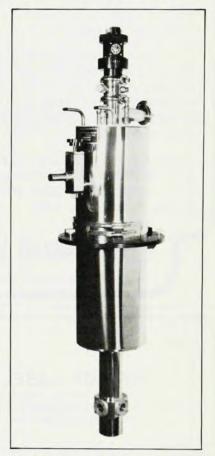
FOX

the postwar years he was a member of a civilian Operations Analysis group with the US Air Force, and he spent portions of several summers on active assignments with the North American Defense Command in Colorado during the 1950's.

Soon after the war he returned to Iowa State to become head of the physics department. Because of illness he relinquished his duties as department head in 1961, and in 1966 retired to his seaside home in Yachats, Oregon. He lived there until continuing illness caused a shift to a nearby nursing home several years before his death on 12 January.

PERCY H. CARR
LESTER T. EARLS
Department of Physics
Iowa State University

the auis "SUPER VARI-TEMP"



is a research dewar for temperature range from 2°K to 300°K.

YET, it is only one of many JANIS dewars for:

- Superconducting Magnets
- Spectrophotometers
- Mössbauer Experiments
 - NMR
 EPR

Options include optical, variable temperature, immersion, tubular, re-entrant and room temperature access types. Catalog available.

Physics/Optics Show



22 Spencer Street Stoneham, Mass. 02180 Telephone (617) 438-3220 Circle No. 137 on Reader Service Card